

Listing of Claims

1. (Currently Amended) A call pick-up system of a switching device, comprising:  
a subscriber call process block for performing a call pick-up function in the switching device; [[and]]

a caller information analysis block, included in the subscriber call process block, for analyzing caller information and providing the analyzed information to a call pick-up subscriber, wherein the analyzed information includes a caller information table having a plurality of unique identifiers for identifying a respective plurality of callers; and

a display control block which controls a display of a call pick-up subscriber telephone, wherein the display control block outputs the caller identification table formed by the caller information analysis block to the call pick-up subscriber display.

2. (Currently Amended) The system of claim 1, wherein the caller information analysis block:

generates a message requesting the caller information,

sends the message to one or more ringed subscribers,

receives a response message from each ringed subscriber,

analyzes the caller information included in the response messages, and

builds [[a]] the caller information table using the caller information and telephone numbers of each ringed subscriber.

3. (Canceled)

4. (Currently Amended) The system of claim 1, further comprising:

~~a call process common block which controls actions for performing call pick-up features;~~

a digit analysis block which analyzes digits dialed by a subscriber and determines whether the dialed digits match ~~[[the]]~~ a call pick-up feature code or match at least one of the unique identifiers (IDs); and

a ring search block which analyzes states of subscribers belonging to a call pick-up group and searches all ringed subscribers; ~~[[and]]~~

wherein the display control block is an LCD control block or an LCD/LED control block which displays the information analyzed at the caller information analysis block on ~~[[the]]~~ an LCD (Liquid Crystal Display) or LED (Light Emitting Diode) of the telephone of the call pick-up subscriber.

5. (Currently Amended) A call pick-up system of a switching device, comprising:

a caller information analysis block which analyzes information of a caller who made a call to a specific subscriber and provides the analyzed information to a call pick-up subscriber;

a call process common block which controls actions for performing call pick-up features;

a digit analysis block which analyzes digits dialed by the subscriber and determines whether the dialed digits match a pick-up feature code or match a unique ID;

a ring search block which analyzes states of a subscriber belonging to a call pick-up group and searches for all ringed subscribers; and

a LCD control block or a LCD/LED control block that displays information analyzed at the caller information analysis block on the LCD (Liquid Crystal Display) or LED (Light Emitting Diode) of telephone of the call pick-up subscriber.

wherein the analyzed information includes a caller information table having a plurality of unique identifiers for identifying a respective plurality of callers, and

wherein the LCD control block or LCD/LED control block displays the caller identification table formed by the caller information analysis block to the call pick-up subscriber display.

6. (Currently Amended) The system of claim 5, wherein the caller information analysis block:

generates a message requesting the caller information,

sends the message to one or more ringed subscribers,

receives a response message from each ringed subscriber,

analyzes the caller information included in the response messages, and

builds [[a]] the caller information table using the caller information and telephone numbers of each ringed subscriber.

7. (Canceled)

8. (Currently Amended) A call pick-up method of a switching device, comprising:

searching for ringed subscribers belonging to a same call pick-up group of a switching device;

receiving caller information from the searched ringed subscribers; and  
generating a caller information table from the received caller information, the caller information table including a plurality of unique identifiers for identifying a respective plurality of callers;  
controlling display of ~~providing~~ the caller information table on a telephone of  
[[to]] a call pick-up subscriber; and  
performing a selective call pick-up by using the caller information.

9. (Canceled)

10. (Currently Amended) The method of claim 8, wherein executing the call pick-up comprises:

analyzing dialed digits by the call pick-up subscriber and determining whether the dialed digits match a call pick-up feature code;

searching for the ringed subscribers belonging to the same call pick-up group and transmitting the caller information request message to each identified ringed subscriber;

receiving a response message including the caller information from the ringed subscribers, analyzing the received information, and building [[a]] the caller information table;

notifying the call pick-up subscriber of the caller information by using the caller information table which includes the caller information of the ringed subscribers;

analyzing the dialed digits by the call pick-up subscriber, determining whether the dialed digits match a specific caller selection code, and notifying one or more ringed subscribers of the existence of the call pick-up subscriber;

receiving a response message from the ringed subscriber and transmitting the response message to the call pick-up subscriber; and

receiving a call pick-up notice message from the call pick-up subscriber, transmitting the message to the specific caller, and receiving a response message, thereby enabling one-to-one communication.

11. (Canceled)

12. (Original) The method of claim 10, wherein executing the call pick-up further comprises:

allowing telephones of the ringed subscribers to continue to ring so that another call pick-up subscriber can pick up the call when the call pick-up subscriber sends the code for giving up the call pick-up; and

waiting for receipt of the call pick-up feature code.

13. (Currently Amended) The method of claim 10, wherein executing the call pick-up further comprises:

checking whether there are other ringed subscribers in the same call pick-up group;

transmitting a caller information request message to the relevant ringed subscribers; and

receiving the caller information from the ringed subscribers by analyzing the received information and updating the caller information table.